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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 09/836,014   | 04/17/2001  | Robert Veilleux      | 186.013US1           | 7009             |
| 7590   | 01/03/2005  |                      | EXAMINER             |                  |
| SCHWEGMAN, LUNDBERG & WOESSNER & KLUTH, P.A.<br>P.O. Box 2938<br>Minneapolis, MN 55402 |             |                      | GREEN, CHRISTY MARIE |                  |
|  |             |                      | ART UNIT             | PAPER NUMBER     |
|  |             |                      | 3635                 |                  |

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |
|------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/836,014 | <b>Applicant(s)</b><br>VEILLEUX ET AL. |
|                              | <b>Examiner</b><br>Christy M Green   | <b>Art Unit</b><br>3635                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
   
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
   
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
   
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 14 January 2003.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## DETAILED ACTION

This is a second office action for serial number 09/836014, entitled Structural Wooden Joist, filed on April 17, 2001.

### ***Response to Amendment***

In response to the examiner's office action dated April 8, 2002, the applicant has amended claims 1 and added claims 14.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey, US Patent # 5,867,963 in view Leung, US Patent # 6,308,469.

Hershey discloses the claimed invention a structural wooden joist (20) comprising an elongated lower chord (24), an elongated upper chord (22) in a spaced apart generally parallel opposed relation to the lower chord (figure 7), an openwork web structure joining the chords, the web structure comprising a series of connector members (at 28) formed of inclined branches (28 and 28A) and adhesively secured to the lower and upper chords (column 4, lines 21-26), each **inclined** branch of the

connector members being adhesively joined to one another (column 4, lines 38-44), the connector members forming V-shaped structural elements (28, 28A and 28 and 28B – **figure 1**) with one connection to the lower chord and two connections to the upper chord (see attached figure 1), the structural elements defining a series of triangular openings in the web structure (figure 7); each of the opposite ends of the web structure displays a laminated panel (30A, 34A) the panels are a series of vertical planks having upper and lower sides joined to upper and lower chords (22, 24); each of the connector members at the opposite end of the web structure is adhesively joined to a chord member and to an innermost plank (30A, 30B) of the laminated panel (34A, 34B); the connector members of the web structure have upper and lower edges secured to the chords by finger joints (column 4, lines 23-26); the planks (74) of the connector member of the laminated panels are glued edgewise to one another (column 7, lines 4-9); and, the wood is selected from the group including fir, spruce and pine (column 4, lines 13-15).

Hershey does not disclose each **inclined** branch of the connector members being formed of at least two planks having contiguous sides. Leung teaches that it is known in the art to provide each **inclined** branch (22) of the connector members (24) being formed of at least two planks having contiguous sides. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide at least two planks in an inclined branch in order to enable the structure to withstand the design forces (column 3, lines 50-55).

Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of Leung and further in view of Koo et al., Us Patent #, 5,592,880.

Hershey in view of Leung discloses the claimed invention as stated above in claim 1, except for a central region free of connector members in the web structure and central region being formed of a series of vertical planks secured to one another. Koo teaches that it is known in the art to provide a central region (41) free of connector members (by 12, 14, 37 and 38 - figure 1) or with vertical planks (37 and 38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the central region of Koo with the web structure of Hershey in view of Leung in order to allow ductwork to pass through the structure (column 3, lines 38-41) or in order to further strengthen the structure as well as allowing ductwork to pass through the structure.

Claims 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey.

Hershey discloses the claimed invention as stated above in claim 1, except for the planks are made of kiln dry wood, the fibers of the planks extend in the longitudinal direction, each connector member extends obliquely at about 35° and 42° relative to the chords for a joist having a height of about 9.25 and 11.25 inches. It would have been obvious to one having ordinary skill in the art that the fibers of the planks extend in the longitudinal direction as the 2x4 extends within the longitudinal direction as well. It would have been an obvious matter of design choice to provide the planks of kiln wood and each connector member extends obliquely at about 35° and 42° relative to the

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chords for a joist having a height of about 9.25 and 11.25 inches, since applicant has not disclosed that this type of wood, the angles of the connector members and the height of the joist solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the type of wood used, the angles of the connector members and the height of the joist of the reference cited.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Hershey.

Leung discloses the claimed invention a structural wooden joist comprising, a first and second elongate chord spaced apart from one another (attached figure 5), a web structure (at 24) joining the first chord and the second chord and forming openings between the first chord and the second chord, the web structure including a series of V-shaped arrangements (at 22) comprising two connector members (where 22 points to), each connector member comprising a first plank and a second plank (see attached figure 5), the first plank having a first side, a first end, and a second end (see attached figure 5), second plank having a second side, a third end and a fourth end (see attached figure 5), and the first and third ends are secured to the first chord (attached figure 5). Leung does not disclose that the first side is adhesively secured to the second side and the first and third ends are adhesively secured to the first chord, and the second and forth ends are adhesively secured to the second chord.

Hershey teaches that it is known in the art to provide planks that are adhesively secured to one another (column 4,lines 38-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the

adhesive as taught by Hershey with the planks of Leung, in order to further secure the structure as a whole with the nail plates included.

In regards to the second and fourth ends being secured to the second chord, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the second and forth ends to be secured to the second chord, since it has been held that rearranging parts of an invention involves only routine skill in the art.

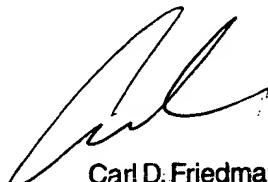
#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christy M Green whose telephone number is 703-308-9693. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Carl D. Friedman  
Supervisory Patent Examiner  
Group 3600

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cg  
December 21, 2004